

**SP-R17 Recreation Needs Analysis***October 25, 2002***1.0 Introduction/Background**

The recreation needs analysis is the first step in developing a comprehensive master recreation plan for the Study Area. It is a compilation of all the information collected in the other recreation and socioeconomic studies.

**2.0 Study Objective**

The objective of this study is to summarize recommendations from all other Federal Energy Regulatory Commission (FERC)-related studies to address recreation needs for existing and potential facilities and areas during the next license period.

**3.0 Relationship to Relicensing/Need for the Study**

This study is needed because FERC regulations require a comprehensive recreation plan, with a schedule of future recreation developments (Subpart F, Section 4.51 of 18 CFR).

The results of the study will address all Issue Statements identified by the Recreation and Socioeconomic Work Group, including:

- R1—adequacy of existing project recreation facilities, opportunities, and access to accommodate current use and future demand
- R2—adequacy of public safety at the Study Area recreational facilities
- R3—effects of facilities operations on recreation and socioeconomic opportunities
- R4—adequacy of operations and maintenance (O&M) and clean-up activities associated with existing and new recreation areas
- R5—appropriate recreation funding, development, and management structure, and the resulting specific recreation activities
- R6—appropriate management of fisheries and wildlife resources to provide recreational opportunities
- S1—improve economic development through recreation opportunities at facilities
- S3—assess economic impacts of the Oroville Facilities and their operations on local governments, residents, agriculture, business, and other interests in Butte County

FERC requires the development of a recreation needs analysis. To satisfy this requirement, a synthesis of prior study results is needed. Existing recreation needs will be identified and future needs will be projected for increments of time (i.e., 10 year periods) over the term of the new license.

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Needs will be assessed for existing and potential future developed recreation facilities, as well as dispersed use areas and activities within the Study Area.

Results will be used to analyze the potential effects of hydropower development and operations on recreation resources and to develop protection, mitigation, and enhancement measures (PMEs) based on these needs. Recreation needs identified in the Study Area will be coordinated with other technical resource areas to identify any potential resource conflicts. Identified recreation needs will be considered by the California Department of Water Resources (DWR) for potential PMEs in the draft license application.

## **4.0 Study Area**

The Study Area includes Lake Oroville, the lands and waters within and adjacent to (1/4 mile) the FERC project boundary, and adjacent lands, facilities, and areas with a clear Project nexus.

## **5.0 General Approach**

### **Task 1—Review Results from Previous Recreation Studies**

This task will compile and review recreation data and results for the Study Area for the analyses shown below.

#### ***Demand Analyses:***

- SP-R4—Assess Relationship of Fish/Wildlife Management and Recreation\*;
- SP-R5—Assess Recreation Areas Management\*;
- SP-R7—Reservoir Boating Survey;
- SP-R9—Existing Recreation Use Study;
- SP-R12—Projected Recreation Use;
- SP-R13—Recreation Surveys;
- SP-R14—Assess Regional Recreation and Barriers to Recreation; and
- SP-R18—Recreation Activity and Spending/Economic Impacts.

#### ***Supply Analyses:***

- SP-R1—Public and Private Vehicular Access;
- SP-R2—Recreation Safety Assessment;
- SP-R6—ADA Accessibility Assessment;
- SP-R10—Recreation Facility and Condition Inventory;
- SP-R11—Recreation and Public Use Impact Assessment; and
- SP-R14—Assess Regional Recreation and Barriers to Recreation; and
- SP-R16—Whitewater and River Boating.

#### ***Opportunities and Constraints Analyses:***

- SP-R3—Assess Relationship of Project Operations and Recreation;
- SP-R4—Assess Relationship of Fish/Wildlife Management and Recreation\*;
- SP-R5—Assess Recreation Areas Management\*;

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- SP-R8—Carrying Capacity; and
  - SP-R15—Recreation Suitability Study

*\*These studies are both demand and opportunity constraint analyses.*

Pertinent results or indicators from each of these studies related to recreation needs will be identified and organized for use in Task 2.

### Task 2—Identify Overall Recreation Needs

Overall recreation needs within the Study Area will be assessed by comparing and contrasting recreation study results and indicators related to demand, supply, opportunities and constraints factors to arrive at conclusions regarding recreation needs. Needs will be defined for current and future recreation opportunities based on projected use. Needs will also be based on a clear definition of project nexus. Results of the foregoing studies must demonstrate how the project is affecting some facet of recreation within the Study Area.

This process will essentially follow a generalized formula: supply - demand = needs. For example, researchers evaluating recreation needs will consider demand findings such as people at-one-time (PAOT), boats at-one-time (BAOT), and supply findings such as facilities inventories and regional recreational opportunities. They will then calculate where supply is negative or positive for current and future recreation needs.

Researchers will attempt to place opportunity deficiencies (current and future) into a management context. For example, the duration and location of a deficiency could be defined and corrective actions could be recommended.

Existing needs-related data for the Study Area from the demand, supply, and capacity and suitability analyses will be used during this task to focus on developing overall recreation needs within the Study Area, without specifying where particular needs may be met. However, general area identifications will be made. These can be examined at a later date in order to detail development feasibility and determine exact locations of facility developments. For example, identifying general areas where camping or boat launch ramps could be enhanced or developed is one goal of this assessment. At a later date, the identified needs areas can be examined for specific details necessary for construction. This needs assessment will not provide specific details necessary for site construction. A number of interrelated factors will be considered under this overall task. Sources of data for these factors may include:

- Recreation visitor survey responses;
- Visitors' perceptions of crowding and crowding criteria;
- Projected increases in demand for various activities, including consideration of possible changes in users' demographics, ethnicity, disposable income, and changes in the regional economy, recreation technology, and equipment;
- Seasonal and weekday/weekend occupancy rates;
- Facility and use area capacity utilization;
- Physical and spatial arrangement of existing facilities and use areas;
- Existing facility conditions and accessibility guidelines and report recommendations;
- Suitability analyses depicting potential sites or areas;
- Opportunities for in-fill, redesign, or expansion of existing facilities;

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- Management goals and objectives of published plans;
  - Visual observations and observed impacts from existing use; and
  - Professional judgment.

### Task 3—Identify Recreation Needs on a Site-by-Site Basis

The previous task looked at the broader context of needs within the Study Area, generally by activity type. This task will take those identified needs and identifies where they may be accommodated on a site-by-site basis. Some needs may be satisfied by implementing one or more alternatives. Site-specific needs will be identified through review and analyses of several data sources, including:

- Recreation survey responses about specific sites
- Seasonal and weekday/weekend occupancy rates at specific sites
- Spatial arrangement of sites and design problems observed
- Recreation facility conditions
- Accessibility compliance and guideline recommendations at sites
- Potential sites as identified in the GIS-based suitability analysis
- Opportunities for in-fill, redesign, or expansion at each site
- Observed impacts of use at each site
- Professional judgment
- Reservoir operations/water conditions (to include analysis of reservoir pool levels and shoreline conditions, water temperature, and flow levels in the Feather River)

The identification of future needs will stem from a list of identified existing needs. This analysis will project overall recreation needs into the future in 10-year increments. Where new facilities might be considered in a given area to satisfy demand, their anticipated implementation date will be projected. Primary indicators used in defining future needs for developed facilities include projected increases in demand over the new license period and anticipated facility utilization.

Projected future needs will be estimated for each developed facility, use area, trails, and selected activities. The needs analysis will consider various environmental and capacity constraints that limit recreation suitability of sites identified for potential new recreation developments.

### Task 4—Assessing Project-Related Recreation Needs

Not all needs identified in the preceding tasks can automatically be assumed to be the result of project-related impacts. Some identified recreation needs will likely be associated with federal, state, local and private entities. Associating recreation needs with the project will entail consultation with local stakeholders, recreational interest groups, and agencies with mandatory conditioning authority, and consideration of various contributing factors. Assessing recreation needs may also involve re-analysis of data collected during the first-year studies, or may require additional data collection as part of a second-year study. For example, a small sample size of recreational visitors may have identified a problem that is occurring as a result of project operations. However, the sample size may be so small that the conclusions drawn may be invalid. Two of the likely factors to consider include proximity to the project and direct project cause. Further discussion is needed to define other appropriate factors to consider.

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Once these factors are identified, they will be applied to the list of identified recreation needs within the Study Area to define the subset of needs associated with the project.

## **6.0 Results and Products/Deliverables**

### ***Results***

This study will result in a series of recommendations regarding needed improvements to meet Study Area recreation needs during the next license period.

### ***Products/Deliverables***

The following products will be developed for this study:

- Interim Needs Analysis Report
- Draft Final Needs Analysis Report

Because this assessment is comprehensive, an Interim Report will be presented during the research process. The results from Tasks 1 through 4 will be presented in the Draft Final Report with tables and descriptive text. This report will synthesize the results of the previous studies by activity type. Existing and future recreation needs will be defined using indicators from the various supply, demand and capacity/suitability analyses. Sites where these needs might be accommodated will be discussed. Those needs associated with the project will be defined based on identified criteria.

At a minimum, the Needs Analysis Reports will contain: a description of the Study Area's recreation resources; a description of the region's recreational resources; local, regional and national trends that affect the Study Area; and a description of existing recreation use along with projected use. Use projections may be presented in different scenarios, with each scenario representing a different set of assumptions about how various factors (e.g., changing demographics, changes in recreation technology) will affect future recreation use. Finally, a discussion of recommendations to accommodate current and future use will be presented. This discussion will be organized by geographic area, and recreational activity or experience types.

The Needs Analysis reports will also contain a Study Area trails plan. The trails plan will contain sections on:

- Existing trails; miles, types of activities permitted, regulations
- Current and projected trail use
- Maintenance schedule
- Trail segments requiring major maintenance or reconstruction
- Recommended improvements, including new trail construction

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## 7.0 Coordination and Implementation Strategy

### *Coordination with Other Resource Areas/Studies*

This study will require coordination with the studies shown below.

#### *Demand Analyses:*

- SP-R4—Assess Relationship of Fish/Wildlife Management and Recreation\*;
- SP-R5—Assess Recreation Areas Management\*;
- SP-R7—Reservoir Boating Survey;
- SP-R9—Existing Recreation Use Study;
- SP-R12—Projected Recreation Use;
- SP-R13—Recreation Surveys;
- SP-R14—Assess Regional Recreation and Barriers to Recreation; and
- SP-R18—Recreation Activity and Spending/Economic Impacts.

#### *Supply Analyses:*

- SP-R1—Public and Private Vehicular Access;
- SP-R2—Recreation Safety Assessment;
- SP-R6—ADA Accessibility Assessment;
- SP-R10—Recreation Facility and Condition Inventory;
- SP-R11—Recreation and Public Use Impact Assessment; and
- SP-R14—Assess Regional Recreation and Barriers to Recreation; and
- SP-R16—Whitewater and River Boating.

#### *Opportunities and Constraints Analyses:*

- SP-R3—Assess Relationship of Project Operations and Recreation;
- SP-R4—Assess Relationship of Fish/Wildlife Management and Recreation\*;
- SP-R5—Assess Recreation Areas Management\*;
- SP-R8—Carrying Capacity; and
- SP-R15—Recreation Suitability Study

*\*These studies are both demand and opportunity constraint analyses.*

### *Issues, Concerns, Comments Tracking, and/or Regulatory Compliance Requirement*

The results of the study will address all Issue Statements.

- R1—adequacy of existing project recreation facilities, opportunities, and access to accommodate current use and future demand. Issues RE 1, 2 5-17, 19-39, 55, 56, 60, 64-83, 95, 96, 104, and 105.
- R2—adequacy of public safety at the Oroville project recreation facilities. Issues RE 49, 92, and 93.
- R3—effects of facilities operations on recreation and socioeconomic opportunities. Issues RE 50, 51, 63, and 109.

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- R4—adequacy of operations and maintenance and clean-up activities associated with existing and new recreation areas. Issues: RE 87-88.
  - R5—appropriate recreation funding, development, and management structure. Issues RE 3, 4, 5-10, 12, 13-15, 28-39, 53, 55, 56, 60, 61, 63-83, 85, 96, and 104.
  - R6—appropriate management of fisheries and wildlife resources to provide recreational opportunities. Issues RE 48, 63, and 107-109.
  - S1—improve economic development through recreation opportunities at the Oroville Facilities.
  - S3—assess economic impacts of the Oroville Facilities and their operations on local governments, residents, agriculture, business, and other interests in Butte County

## **8.0 Study Schedule**

Data collection: On-going, since this study will summarize data from all other studies.

Data analysis and report writing: May through October 2003.

Interim Needs Analysis Report due: September 2003.

Draft Final Needs Analysis Report due: November 2003.

## **9.0 References**

Hydroelectric project licensing handbook. Federal Energy Regulatory Commission, Washington, DC. April 2001.

Recreation Development at Licensing Hydropower Projects. Division of Project Compliance and Administration, Office of Hydropower Licensing, Federal Energy Regulatory Commission.